

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

AMES RESEARCH CENTER

Klein

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Dr. Orr Reynolds
Office of Space Sciences
NASA
Washington, D. C.

Dear Dr. Reynolds:

I wish to thank you for inviting me to the recent meeting of the Bioscience Subcommittee. It was a source of much useful information for me.

I must admit that I did not expect to stir up quite so much discussion there, concerning the kind of work that we would like to do. Since then, I have given quite a bit of thought to some of the points that were raised by various people at the meeting and would like to clarify for you some aspects of my position.

To begin with, I sensed two basic kinds of conflict in the minds of some of the people there. The first conflict deals with the question of whether the Exobiology Division here should become involved in scientific work of a broad nature -- for example, the research problems that one might find in a modern department of Biology - or with more limited and specific objectives, namely, work in Exobiology. I felt that some of the committee members, rightly or wrongly, suspected that our Exobiology Division could become a multiply-oriented research institute - with no specific purpose other than to generate research in biology. In this regard, I am quite definite in my attitude that this laboratory must direct its energies toward research in Exobiology. Indeed, throughout my negotiations with the administration here at Ames, I have stressed this point of view. I now wish to give you every assurance that, as far. as this conflict is concerned, my intent is to concentrate on the field of Exobiology with every possible effort. My wish is to make this laboratory a center for studies of this kind.

The second conflict (which, I believe, became confused by considerations of the first conflict) is quite different: Assuming that our laboratory will focus on Exobiology, the question is, shall this focus be primarily research-oriented, or shall our effort be channeled into applied aspects? I realize that the line between basic and applied work is often quite fuzzy - but we can make a choice of where to put this effort, and it is my intent to put it as far toward the basic research as possible. I believe that the best practical results are obtained when they are preceded by thorough research. I do not believe that practical and applied

research are mutually exclusive, I merely say that better practical applications can be expected if they are generated from the work of the best possible people, and the latter tend to be found most often among those who are not specifically goal-oriented.

Let me assure you, in connection with this second conflict, that I fully appreciate the over-all objectives of NASA with regard to space exploration, and share the feeling that it is a responsibility of NASA to move effectively and rapidly to search for extraterrestrial life. Certainly, as I indicated last week, should we, for example, uncover a more useful assay system with which to look for life, I would not be content merely to publish the results of the research on this problem. But, I would push with full energy to test such a system out where it really counts -- namely, in a space vehicle.

I trust that these philosophical remarks will help you in your assessment of our potential value to the NASA Space Sciences Program.

Yours sincerely,

Harold P. Klein